



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Constantin Bulucea and Rebecca Rossen

Assignee: Siliconix incorporated

Title: Trench DMOS Power Transistor With Field-Shaping Body Profile and Three-Dimensional Geometry

Serial No.: 08/851,608

Filed: May 5, 1997

Examiner: S. Crane

Group Art Unit: 2811

Atty. Docket No.: M-799-4C US

San Jose, California  
23 December 2002

BOX CPA  
COMMISSIONER FOR PATENTS  
Washington, D. C. 20231

PRELIMINARY AMENDMENT

Sir:

Please amend the above patent application as follows:

IN THE CLAIMS

Amend Claims 17 - 23, 25, 26, 29 - 42, 46 - 48, and 52 - 65 to read as follows with unchanged Claims 27, 28, 44, and 49 - 51 being repeated below for the Examiner's convenience:

1  
--17. (Four times amended) A trench DMOS transistor cell comprising:  
a substrate of a first conductivity type, said substrate having a surface;  
an epitaxial layer of said first conductivity type formed on said surface of said substrate, said epitaxial layer having a top surface and a bottom surface, said epitaxial layer having a substantially uniform initial dopant concentration at formation;  
a body region of a second conductivity type opposite to said first conductivity type formed in said epitaxial layer, said body region extending, as measured from said top surface of said epitaxial layer, to a first depth  $d_{\max}$  at a first location and to a depth  $d$  at a second

LAW OFFICES OF  
SKJERVEN MORRILL LLP  
25 METRO DRIVE, SUITE 700  
SAN JOSE, CA 95110  
(408) 453-9200  
FAX (408) 453-7979

#41/4  
83-03  
Payton  
Fees Paid  
#40 in

RECEIVED  
DEC 30 2002  
TECHNOLOGY CENTER 2800

41